

I Claim  
~~Patent claims~~

- Sub  
Q1
1. A device for detecting the position of a selector lever, in which the selector lever is connected to a device that emits a signal to an evaluation device in a desired position of the selector lever, wherein the selector lever (1) is connected to a diaphragm (2, 3) arranged in the beam path between an optical transmitter (18) and an optical receiver (9, 10, 11, 12, 13, 14), the diaphragm (2, 3), which follows the movement of the selector lever (1), being designed in such a way as to be optically transparent in the desired position of the selector lever (1), as a result of which the optical receiver (9, 10, 11, 12, 13, 14) receives the signal from the optical transmitter (18) and transmits it to the evaluation device (15).
  2. The device as claimed in claim 1, wherein there is an optical receiver (9, 10, 11, 12, 13, 14) for each position of the selector lever (1) to be determined, and an opening (5, 6, 7) in the diaphragm (2, 3) is moved over the optical receivers (9, 10, 11, 12, 13, 14) when the selector lever (1) is moved.
  3. The device as claimed in claim 2, wherein the optical receivers (9, 10, 11, 12, 13, 14) are arranged in a fixed manner on a carrier element (8) in accordance with the sequence of motion of the selector lever (1).
  4. The device as claimed in claim 3, wherein the evaluation device (15) connected to the optical receivers (9, 10, 11, 12, 13, 14) is arranged on the carrier element (8).
  5. The device as claimed in claim 3, wherein at least one optical transmitter (18) is arranged on the carrier element (8), the optical signal of which can be deviated onto the diaphragm (2, 3) by means of a light guide.
  6. The device as claimed in claim 1 or 2, wherein there is one diaphragm (2, 3) for each direction of motion of the selector lever (1).

Sub  
al

8. The device as claimed in claim 7, wherein the second diaphragm (3), which follows the selector lever (1) in an approximately vertical direction (y), has two optically transparent openings (6, 7), the vertical movement of the selector lever (1) being converted into a circular-arc-like movement of the diaphragm (3).

9. The device as claimed in claim 5, 6 and 8, wherein the light guide is designed to cover an extended area to ensure uniform distribution of the optical signal over the diaphragms (2, 3).

add 92

add B37

[illegible]